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February 13, 2002

Mr. William F. Caton
Office of the Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

RE: Ex Parte Presentation, WT Docket No. 01-333

Dear Mr. Caton:

On February 11, 2002, VoiceStream Wireless Corporation (VoiceStream), represented by Brian O'Connor, Gary Jones, and Bob Calaff, and the National Communications System (NCS), represented by Peter Fonash and Paul Schwedler, met with the Wireless Telecommunications Bureau (represented by Tom Sugrue, Kathleen Ham, Cathy Seidel, Scot Stone, Barry Ohlson, John Schauble , Jeanne Kowalski and Karen Franklin) regarding Wireless Priority Service (WPS).

Gary Jones described the features and functions of the immediate WPS solution proposed by VoiceStream. This solution does require a short-term waiver of one of the Commission's technical requirements for WPS (i.e., the ability to invoke WPS on a per call or per session basis). The initial deployment of WPS would be in the Washington DC and New York City areas. VoiceStream plans to upgrade WPS in stages and to have a fully compliant WPS in place by the end of the year 2003. VoiceStream is working with other U.S. GSM operators to be prepared to deploy WPS on a nationwide basis.

Peter Fonash discussed how NCS planned to implement WPS and provided data, compiled with the assistance of the Cellular Telecommunications and Internet Association, demonstrating the nominal impact that WPS would have on wireless operators' non-priority customers. Dr. Fonash noted that WPS eventually would be offered by several wireless operators as a public service, further increasing public safety access to WPS and further diluting the nominal impact WPS would have on non-priority customers. Dr. Fonash observed that WPS would be accessed only for public safety purposes, that the nominal impact on non-priority users would be only near the scenes of

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emergencies, and that NCS would monitor WPS usage to detect improper usage (as is done for GETS).

Copies of VoiceStream's and NCS' presentation materials are attached.

Pursuant to Section 1.1200 *et seq.* of the Commission's Rules, VoiceStream gave advance notice and an opportunity to be present at the meetings to the other parties to this proceeding.

Sincerely,

Brian O'Connor

Brian T. O'Connor
Vice-President
Legislative & Regulatory Affairs

Attachments

cc (without attachments):

Tom Sugrue
Kathleen Ham
Cathy Seidel
Scot Stone
Barry Ohlson
John Schauble
Jeanne Kowalski
Karen Franklin

cc (with attachments):

Mike Altschul, CTIA
Bill Harding (General Dynamics)

Wireless Priority Service (WPS)

There are two initiatives ongoing in the United States:

- **Immediate** – VoiceStream Wireless to deploy initial capabilities in Washington DC and New York City to serve 5000 WPS users.
- **Nationwide** – Develop and deploy the technology necessary to deploy a more full featured WPS capability nationwide in all VoiceStream's GSM networks. Join with other U.S. GSM operators to deploy WPS on all GSM networks.

Immediate

- VoiceStream Wireless is in final negotiations with NCS to deploy initial WPS capabilities in Washington DC and New York City.
  - Implemented rapidly to meet the immediate needs of National Security and Emergency Preparedness (NS/EP) users, as directed by government agencies (White House, DoD, NSA, etc.). This initiative meets the President's mandate for ensuring telecommunications supporting national security activities is available and effective.
  - The Immediate capability will provide a subscription-based service with five levels of priority and queuing of priority calls for the next available resource.
  - All calls made by a WPS user will have a high priority level and will be placed in queue for the next available radio resource, should the system be congested.
  - Because of the need for rapid deployment, the system does not fully meet the FCC requirements in the Priority Access Report and Order; thus the Voicestream waiver was filed and supported by the NCS and others.
  - Meant to be a short-term implementation, to be replaced by the nationwide solution, when available.

Nationwide

- The GSM Community in the United States is working to develop a more fully featured WPS capability for deployment nationwide by the end of 2002 and complete WPS capabilities by the end of 2003.
  - Incorporating the ability to invoke priority use on a per-call or per-session basis, which should be in place by the end of 2002.
  - Incorporating end-to-end proirity treatment of wireless calls by the end of 2003.
  - Developing methods of preserving a portion of the system capacity for non-priority and 911 calls, if the system were to become "monopolized" by the priority users.

Security

- Because of requirements from some government agencies (NSA, DoD, CIA, etc.) all GSM-based WPS implementations will support mobile phones capable of offering Type-1 security during priority calls.

Resource Limitations

Unlike the wireline service, the wireless industry is severely constrained by the amount of radio spectrum it can use to offer both WPS and non-priority services. As the result, a balance must be achieved between the needs of the NS/EP users and the general public for which the wireless industry serves.

Impact of Wireless Priority Services

Independent Analysis by:

Paul A Christoforou, on behalf of CTIA

David R. Smith, PhD, George Washington University, SAIC

Joseph E. Wilkes, PhD, PE, Telcordia Technologies

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Purpose of Study

- To provide an Independent Examination of the issues
  - The effect on consumer blocking by offering Wireless Priority Service
  - The density of Wireless Priority users supported in an area
- To provide an independent determination of the Grade of Service offered to Wireless Priority users
- Analysis conducted by three consultants working as a team
  - Paul A Christoforou, on behalf of CTIA
  - David R. Smith, PhD, George Washington University, SAIC
  - Joseph E. Wilkes, PhD, PE, Telcordia Technologies

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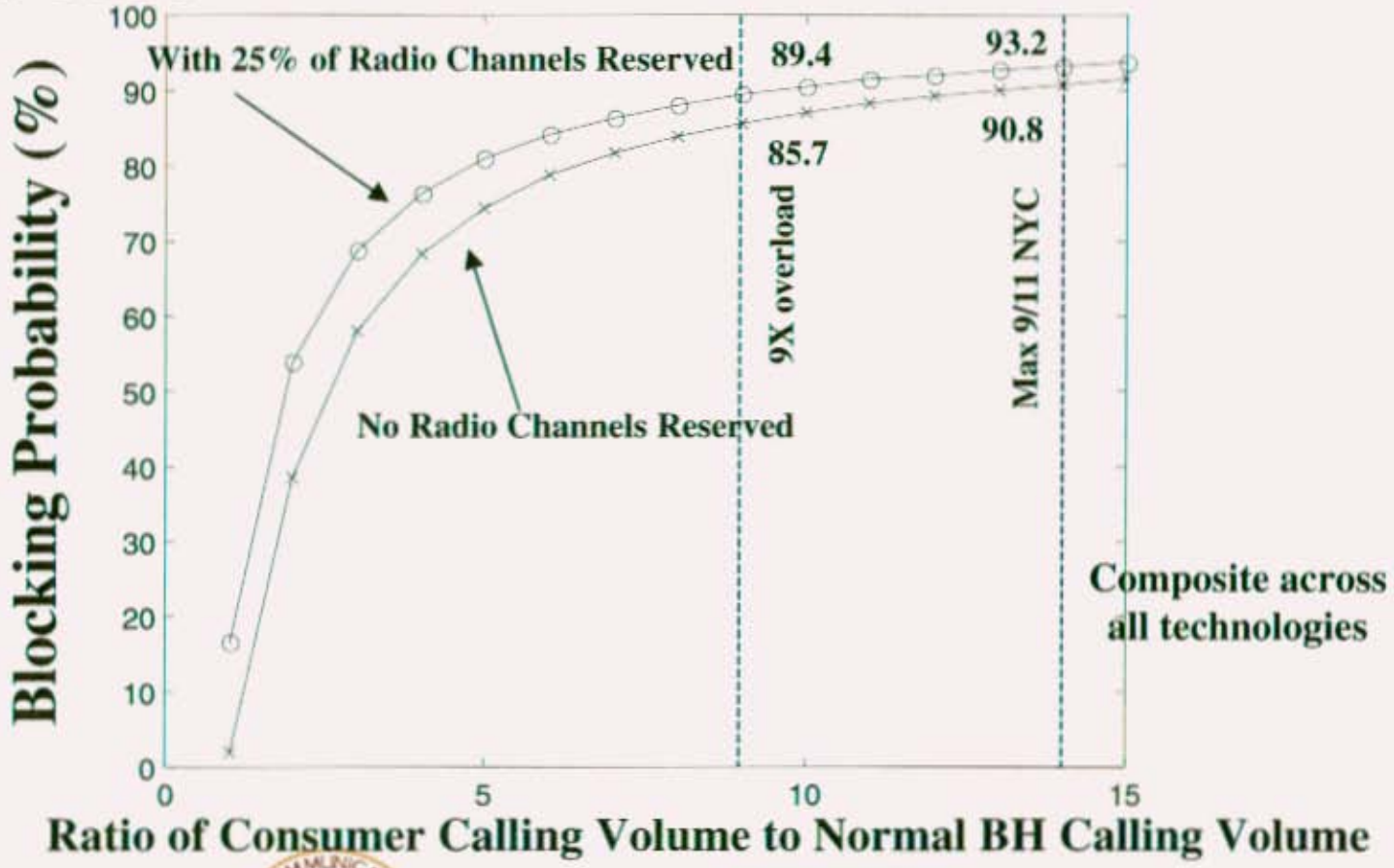
Comparison of Average Consumer Blocking Probability With and Without 25% of Radio Channels Reserved for NS/EP Users



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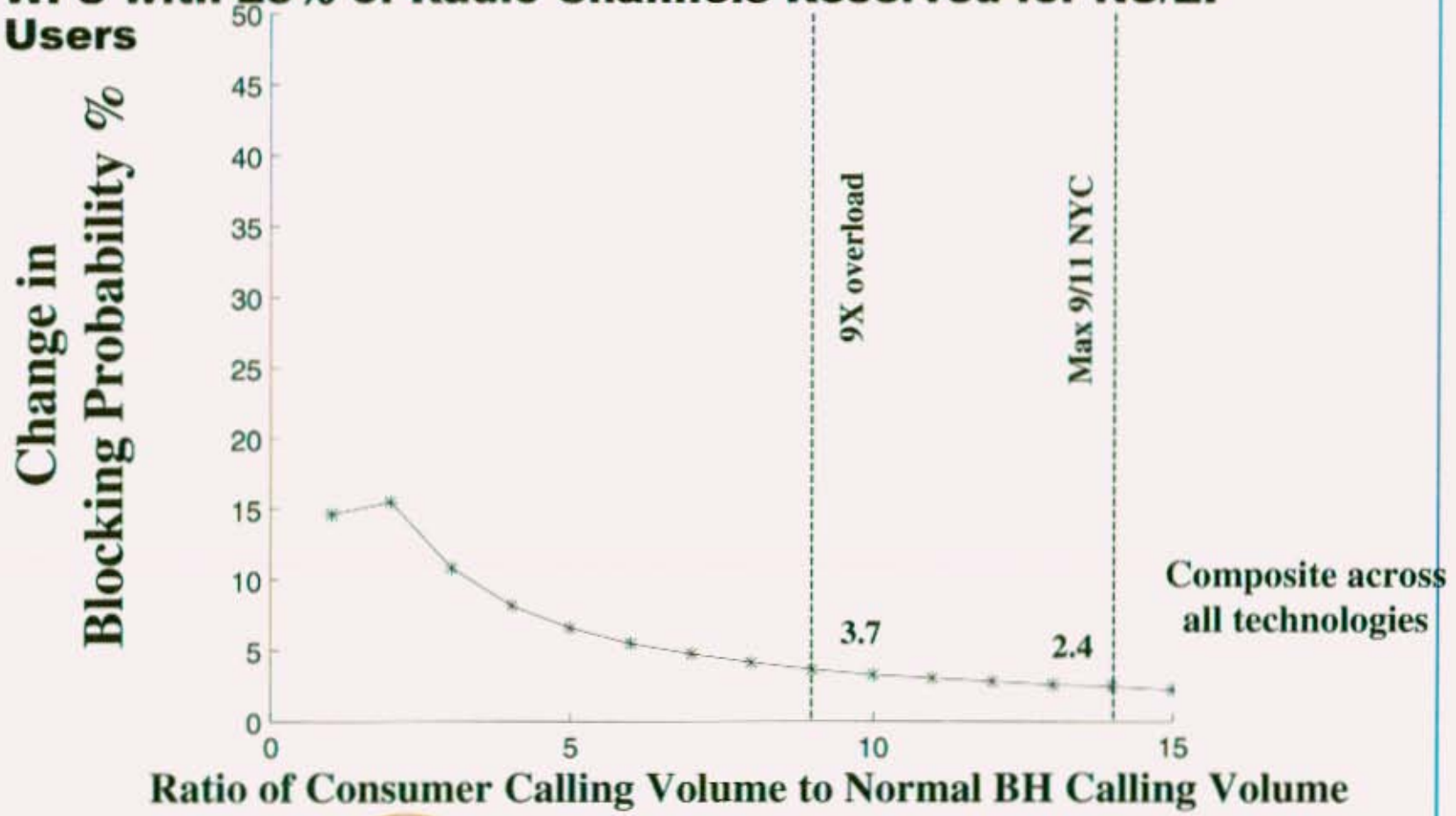
Average Change in Call Blocking for Consumers Due to WPS with 25% of Radio Channels Reserved for NS/EP Users



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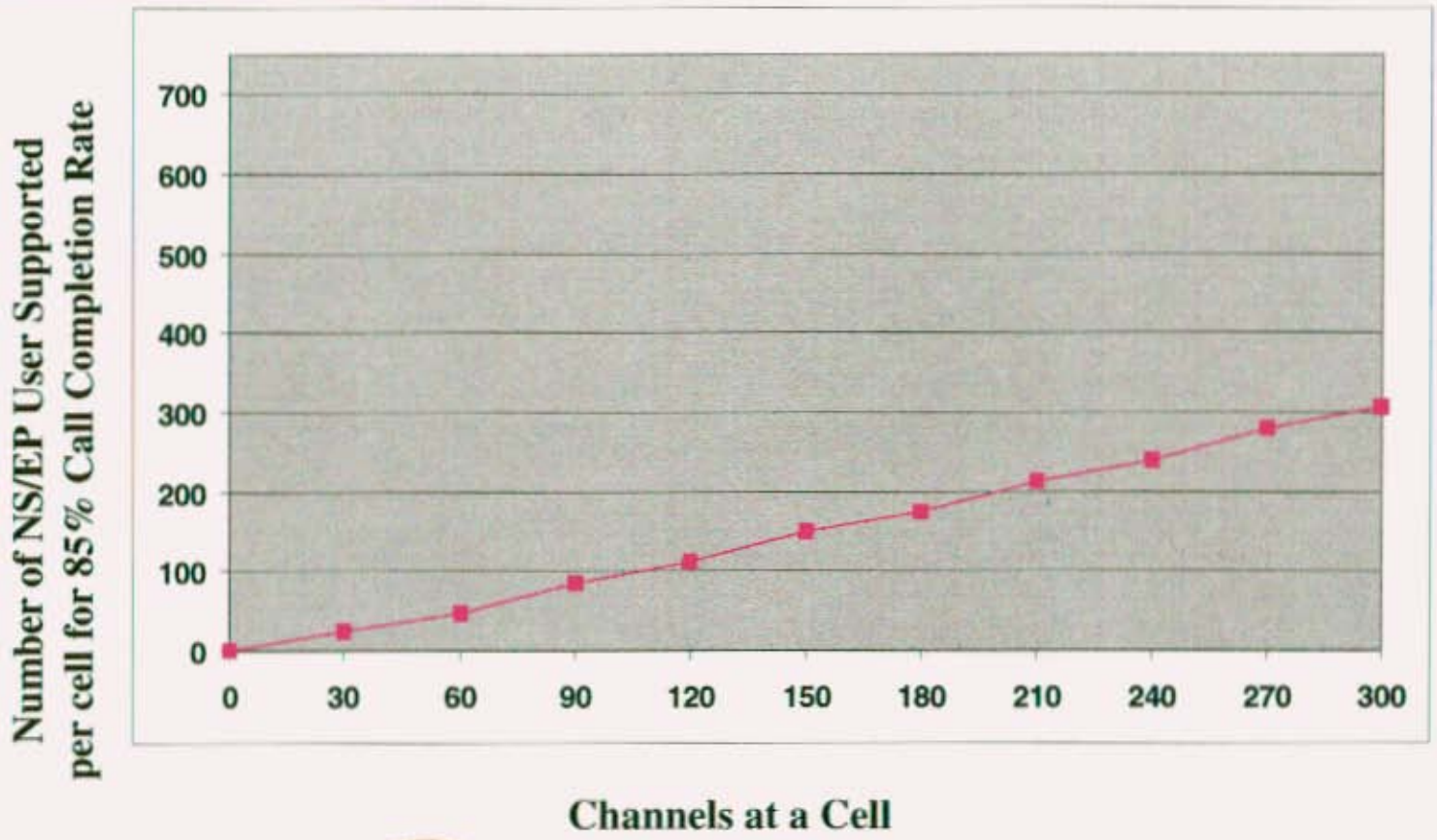
Number of NS/EP Users Supported per Cell Site at 85% Call Completion Rate with 25% of Radio Channels Reserved for NS/EP



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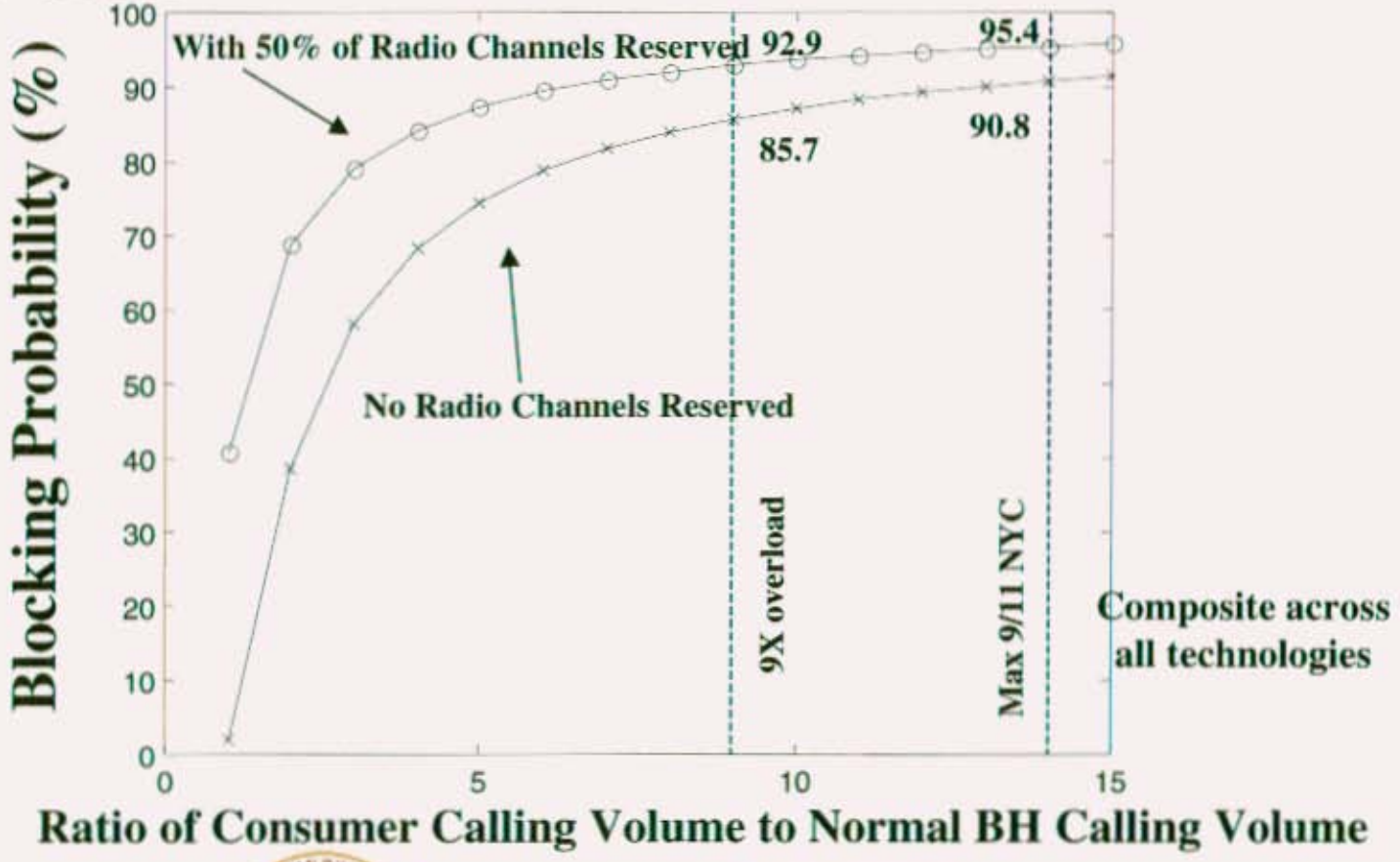
Comparison of Average Consumer Blocking Probability With and Without 50% of Radio Channels Reserved for NS/EP Users



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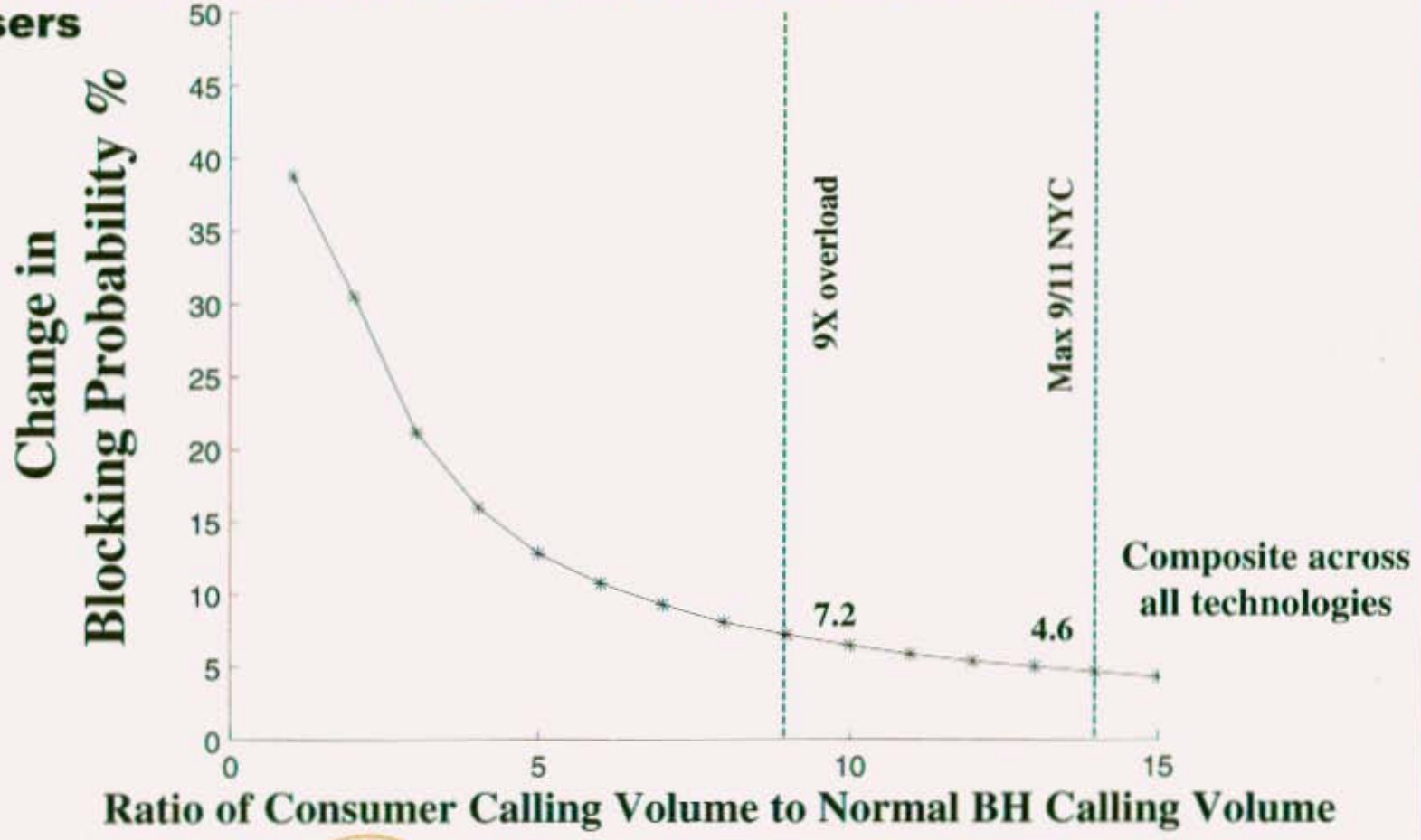
Average Change in Call Blocking for Consumers Due to WPS with 50% of Radio Channels Reserved for NS/EP Users



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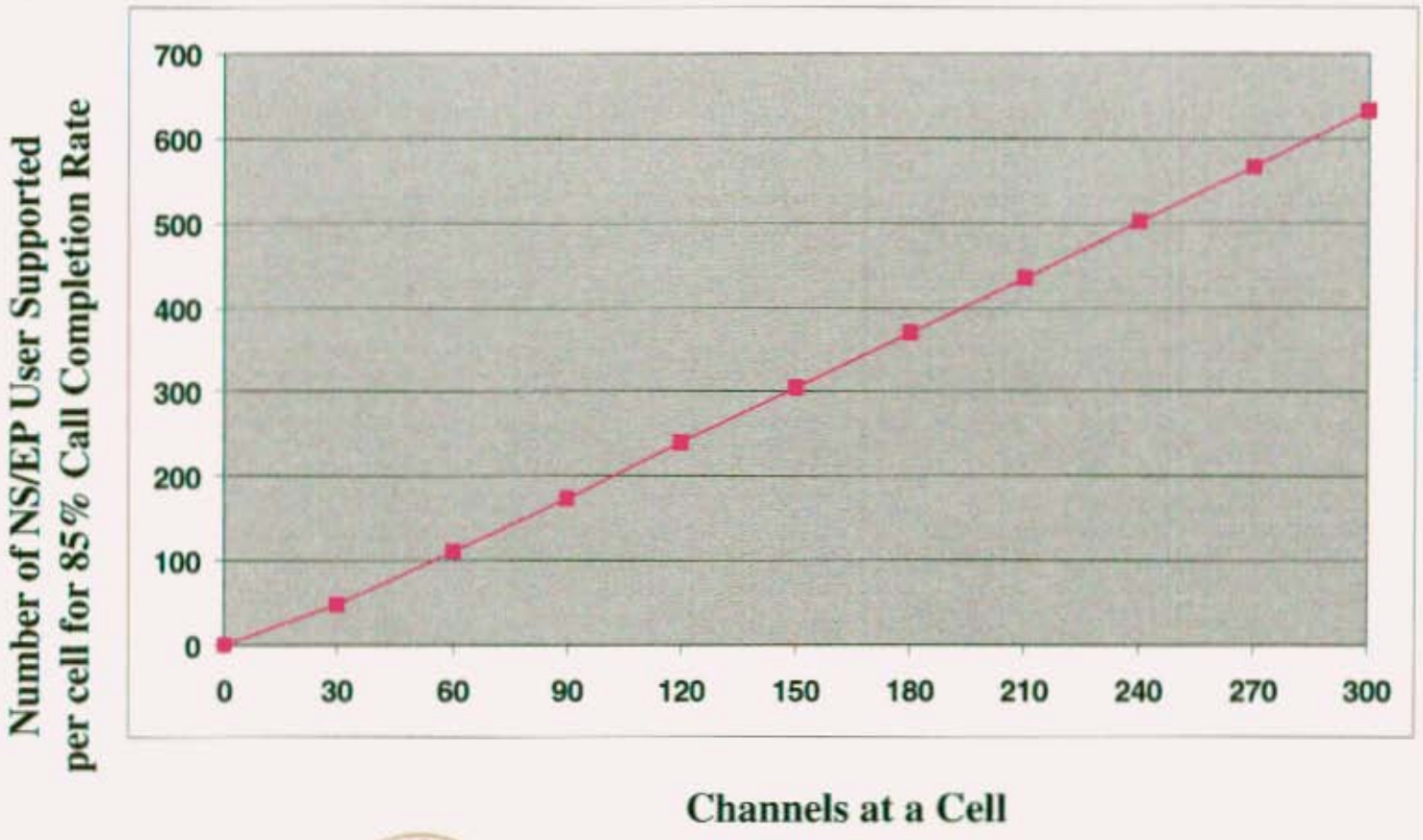
Number of NS/EP Users Supported per Cell Site at 85% Call Completion Rate with 50% of Radio Channels Reserved for NS/EP



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Estimated NS/EP Users Per Cell Site with 25% and 50% of Channels Reserved for NS/EP Users and 85% NS/EP User Call Completion Rate

REPRESENTATIVE CITIES	Avg Channels/Site	25%	50%
Large: Washington DC, NYC			
• CDMA	108-216 Channels	100-220 Users	210-450 Users
• GSM	66-160 Channels	52-155 Users	120-325 Users
• iDEN*	35-40 Channels	30-40 Users	50-70 Users
Medium: Baton Rouge			
• CDMA	54-108 Channels	45-100 Users	100-210 Users
• GSM	66 Channels	52 Users	120 Users
• iDEN*	30 Channels	24 Users	50 Users
Small: Santa Fe			
• CDMA	54 Channels	45 Users	100 Users
• GSM	66 Channels	52 Users	120 Users
• iDEN*	25 Channels	22 Users	45 Users

* Estimated subset of total capacity to interconnect

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Backup Data

Analysis Assumptions

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NS/EP Analysis Assumptions

- NS/EP Grade of Service (GOS) 85% Call Completion Rate = 15% Blocking
  - Based on GETS Past Performance during Emergencies
- Radio Channel Capacity Allocation for NS/EP Users (Part of RFP)
  - 25%
  - 50%

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Analysis Assumptions
Normal Load

- Normal Cellular Radio Engineering for Grade of Service (GOS) 98% Call Completion Rate = 2% Blocking
- Consumers (CTIA Data)
  - Average Holding Time = 150 seconds = 2.5 Minutes
  - Calling Rate = 0.44 calls/hour during busy hour
  - Average Minutes of Use during busy hour = 1.1 minutes/hour
- Cellular Network is designed to meet this load during the busy hour

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Analysis Assumptions
Emergency Load

- Consumers Calling Patterns
  - Requested Minutes of Use during emergency = 1.1X minutes/hour
    - Holding Time = 150 seconds = 2.5 Minutes
    - Calling Rate = 0.44X (X =1 to 15) calls/hour during busy hour
    - X is Times load; 1= Normal Busy Hour Load
- NS/EP Users Calling Patterns
  - Requested Minutes of Use during emergency = 14 minutes/hour
    - Holding Time = 150 seconds = 2.5 Minutes
    - Calling Rate = 5.6 calls/hour during emergency

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